

08-09-06

Attorney's Docket No.: 17601-038001 / 067083.0214



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Joseph A. Zupanick  
Serial No. : 10/769,221  
Filed : January 30, 2004  
Title : METHOD AND SYSTEM FOR TESTING A PARTIALLY FORMED  
HYDROCARBON WELL FOR EVALUATION AND WELL PLANNING  
REFINEMENT

Art Unit : 3672  
Examiner : Hoang C. Dang  
Conf. No. : 9602

**MAIL STOP AMENDMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicant requests consideration of the references listed on the attached PTO-1449 form. Under 37 C.F.R. § 1.98 (a)(2)(ii), only copies of foreign patent documents and/or non-patent literature are enclosed. Copies of any listed U.S. patents, U.S. patent applications or U.S. patent application publications can be provided upon request. A copy of a communication from a foreign patent office in a related application is also enclosed.

This statement is being filed after a first Office action on the merits, but before receipt of a final Office action or a Notice of Allowance. A check for \$180 in payment of the late submission fee of §1.17(p) is enclosed. Please apply any deficiencies or any other required fees or any credits to deposit account 06-1050, referencing the attorney docket number shown above.

Respectfully submitted,

Joshua A. Griswold  
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Date: August 8, 2006

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Substitute Form PTO-1449  
(Modified)U.S. Department of Commerce  
Patent and Trademark OfficeAttorney's Docket No.  
17601-038001Application No.  
10/769,221**Information Disclosure Statement  
by Applicant**

(Use several sheets if necessary)

(37 CFR § 1.98(b))

Applicant  
Joseph A. ZupanickFiling Date  
January 30, 2004Group Art Unit  
3672**U.S. Patent Documents**

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	A1	3,687,204	08/29/1972	Marshall et al.			
	A2	3,759,328	09/18/1973	Ueber et al.			
	A3	4,356,866	11/02/1982	Savins			
	A4	4,396,075	08/02/1983	Wood et al.			
	A5	Re. 32,623	03/15/1988	Marshall et al.			
	A6	5,207,271	05/04/1993	Sanchez et al.			
	A7	5,520,252	05/28/1996	McNair			
	A8	5,664,911	09/09/1997	Bridges et al.			
	A9	5,733,067	03/31/1998	Hunt et al.			
	A10	RE38,642 E	11/02/2004	Gondouin			
	A11	2005/0257962	11/24/2005	Zupanick			
	A12	2006/0096755	05/11/2006	Zupanick			

**Foreign Patent Documents or Published Foreign Patent Applications**

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	B1	WO 03/036023	05/01/2003	WIPO			N/A	
	B2	UA 37,720 A	05/15/2001	Ukraine			Spec Only	

**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
	C1	Notification of Transmittal of the International Preliminary Report of Patentability (1 page) and International Preliminary Report on Patentability (12 pages) mailed January 9, 2006 for International Application No. PCT/US2004/036616
	C2	Notification Concerning Transmittal of Copy of International Preliminary Report on Patentability (Chapter 1 of the Patent Cooperation Treaty) (1 page), International Preliminary Report on Patentability (1 page), and Written Opinion of the International Searching Authority (7 pages) mailed December 22, 2005 for International Application No. PCT/US2004/017048
	C3	European Search and Examination Report, completed December 5, 2005 for Application Number EP 05020737, 5 pages

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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 17601-038001	Application No. 10/769,221
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Joseph A. Zupanick	
		Filing Date January 30, 2004	Group Art Unit 3672

**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
	C4	P.C. Thakur and W.N. Poundstone, "Horizontal Drilling Technology for Advance Degasification," Society of Mining Engineers of AIME, Preprint Number 79-113, For presentation at the 1979 AIME Annual Meeting, New Orleans, Louisiana, February 18-22, 1979, Engineering Societies Library stamp dated February 5, 1980, 11 pages.
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	C6	Wang Weiping, "Trend of Drilling Technology Abroad," Petroleum Drilling and Production Technology, 1995 (Volume 17), Issue 6, <a href="http://www.cnki.net">www.cnki.net</a> , 8 pages, translation, original in Chinese
	C7	Tver, David, <u>The Petroleum Dictionary</u> , 1980, page 221.
	C8	Rennick, et al., "Demonstration of Safety Plugging of Oil Wells Penetrating Appalachian Coal Mines," Bureau of Mines Coal Mine Health and Safety Research Program, Technical Progress Report - 56, U.S. Department of the Interior, July 1972, 25 pages
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	C11	George S. Rice, "Notes on the Prevention of Dust and Gas Explosions in Coal Mines," Technical Paper 56, Bureau of Mines, Department of the Interior, copyright 1913, 12 pages
	C12	George S. Rice, et al., "Oil and Gas Wells Through Workable Coal Beds," Bulletin 65, Petroleum Technology 7, Bureau of Mines, Department of the Interior, copyright 1913, 54 pages
	C13	Notification of Transmittal of the International Preliminary Report on Patentability (1 page) and International Preliminary Report on Patentability (8 pages) for International Application No. PCT/US2005/002162 mailed May 3, 2006
	C14	D. Nathan Meehan, "Technology Vital For Horizontal Well Success," OIL & GAS JOURNAL, December 11, 1995, 8 pages
	C15	B.A. Tarr, A.F. Kuckes and M.V. Ac, "Use of New Ranging Tool to Position a Vertical Well Adjacent to a Horizontal Well," SPE DRILLING ENGINEERING, June 1992, 7 pages
	C16	William J. McDonald, Ph.D., John H. Cohen, and C. Mel Hightover, "New Lightweight Fluids for Underbalanced Drilling," believed to be on or about 1998, 10 pages
	C17	Philip C. Crouse, "Application and Needs for Advanced Multilateral Technologies and Strategies," Website: <a href="http://www.netl.doe.gov/publications/proceedings/97/97ng/ng97_pdf/NG2-5.pdf">www.netl.doe.gov/publications/proceedings/97/97ng/ng97_pdf/NG2-5.pdf</a> ; Believed to be on or about 1997, 9 pages
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	C20	J.D. Gallivan, N.R. Hewitt, M. Olsen, J.M. Peden, D. Tehrani and A.A.P. Tweedie, "Quantifying the Benefits of Multi-Lateral Producing Wells," SPE 30441, Society of Petroleum Engineers, Inc., Copyright 1995, 7 pages

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	C21	C.A. Ehlig-Economides, G.R. Mowat and C. Corbett, "Techniques for Multibranch Well Trajectory Design in the Context of a Three-Dimensional Reservoir Model," SPE 35505, Society of Petroleum Engineers, Copyright 1996, 8 pages
	C22	Stephen R. Dittoe, Albertus Retnanto, and Michael J. Economides, "An Analysis of Reserves Enhancement in Petroleum Reservoirs with Horizontal and Multi-Lateral Wells," SPE 37037, Society of Petroleum Engineers, Copyright 1996, 9 pages
	C23	D.L. Boreck and M.T. Strever, "Conservation of Methane from Colorado's Mined/Minable Coal Beds: A Feasibility Study," Open-File Report 80-5, Colorado Geological Survey, Department of Natural Resources, Denver, Colorado, October 1980, 101 pages
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	C25	W.H. Leach Jr., "New Technology for CBM Production," Oil and Gas Investor, Opportunities in Coalbed Methane, December 2002, 6 pages
	C26	David Wagman, "CBM Investors Keep Their Guard Up," Oil and Gas Investor, Opportunities in Coalbed Methane, December 2002, 5 pages
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	C30	B. Goktas, "A Comparative Analysis of the Production Characteristics of Cavity Completions and Hydraulic Fractures in Coalbed Methane Reservoirs," Society of Petroleum Engineers, SPE 55600, Copyright 1999, 10 pages
	C31	William P. Diamond and David C. Oyler, "Drilling Long Horizontal Coalbed Methane Drainage Holes from a Directional Surface Borehole," Society of Petroleum Engineers, SPE/DOE 8968, 1980, 6 pages
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	C37	Ian Palmer, John McLennan, and Mike Kutas, "Completions and Stimulations for Coalbed Methane Wells," SPE 30012, Society of Petroleum Engineers, Copyright 1995, 13 pages
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	C38	John E. Jochen and Bradley M. Robinson, "Survey of Horizontal Gas Well Activity," SPE 35639, Society of Petroleum Engineers, Copyright 1996, 5 pages
	C39	R.G. Jeffrey, J.R. Enever, J.H. Wood, J.P. Connors, S.K. Choi, K.T.A. Meaney, D.A. Casey, and R.A. Koenig, "A Stimulation and Production Experiment in a Vertical Coal Seam Gas Drainage Well," SPE 36982, Society of Petroleum Engineers, Copyright 1996, 7 pages
	C40	Matt C. Rowan and Michael J. Whims, "Multilateral Well Enhances Gas Storage Deliverability," OIL & GAS JOURNAL, December 25, 1995, 4 pages
	C41	Dan Themig, "Planning and Evaluation are Crucial to Multilateral Wells," Petroleum Engineer International, January 1996, 3 pages
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	C46	John L. Stalder, Gregory D. York, Robert J. Kopper, Carl M. Curtis and Tony L. Cole, and Jeffrey H. Copley, "Multilateral-Horizontal Wells Increase Rate and Lower Cost Per Barrel in the Zuata Field, Faja, Venezuela," SPE 69700, Society of Petroleum Engineers, Copyright 2001, 9 pages
	C47	Brent Lowson, "Multilateral-Well Planning," Synopsis of SPE 39245, JPT, July 1998, 4 pages
	C48	A. Njaerheim, R. Rovde, E. Kvale, S.A. Kvamme, and H.M. Bjoerneli, "Multilateral Well in Low-Productivity Zones," Synopsis of SPE 39356, JPT, July 1998, 4 pages
	C49	S.W. Bokhari, A.J. Hatch, A. Kyei, and O.C. Werngren, "Improved Recovery from Tight Gas Sands with Multilateral Drilling," Synopsis of SPE 38629, JPT, July 1998, 4 pages
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	C53	United States Department of the Interior, "Methane Control Research: Summary of Results, 1964-80," Bureau of Mines Bulletin, Bulletin 687, 1988, 188 pages
	C54	EPA, "Identifying Opportunities for Methane Recovery at U.S. Coal Mines: Profiles of Selected Gassy Underground Coal Mines 1997-2001," EPA Publication EPA 430-K-04-003, July 2004, 202 pages
	C55	Marshall DeLuca, "Multilateral Completions on the Verge of Mainstream," OFFSHORE, April 1997, 2 pages

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	C56	Bob Williams, "Operators Unlocking North Slope's Viscous Oil Commerciality," OIL & GAS JOURNAL, August 6, 2001, 5 pages
	C57	James P. Oberkircher, "The Economic Viability of Multilateral Wells," IADC/SPE 59202, Society of Petroleum Engineers, Copyright 2000, 10 pages
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	C66	"Optimal Multilateral-Well Design for a Heavy-Oil Reservoir," Synopsis of SPE 37554 by D.W. Boardman, JPT, July 1997, 3 pages
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	C73	"A New Concept for Multibranch Technology," Synopsis of SPE 39123 by Mark Stracke et al., JPT, July 1997, 3 pages
	C74	"Classification Clarifies Multilateral Options," Synopsis of SPE 38493 by C. Hogg, JPT, July 1997, 3 pages
	C75	"Infill Development With Multilateral-Well Technology," Synopsis of SPE 38030 by Sau-Wai Wong et al., JPT, July 1997, 3 pages
	C76	Brad Califf and Denny Kerr, "UPRC Completes First Quad-Lateral Well," PETROLEUM ENGINEER INTERNATIONAL, September 1993, 4 pages
	C77	Jack Winton, "Use of Multi-lateral Wells to Access Marginal Reservoirs," OFFSHORE, February 1999, 3 pages

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	C78	J.R. Salas, P.J. Clifford and D.P. Jenkins, "Brief: Multilateral Well Performance Prediction," JPT, September 1996, 3 pages
	C79	Mike R. Chambers, "Multilateral Technology Gains Broader Acceptance," OIL & GAS JOURNAL, November 23, 1998, 5 pages
	C80	S. Ikeda, T. Takeuchi, and P.C. Crouse, "An Investigative Study on Horizontal Well and Extended Reach Technologies With Reported Problem Areas and Operational Practice in North America and Europe," IADC/SPE 35054, Society of Petroleum Engineers, Copyright 1996, 8 pages
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	C82	Bambang Tjondrodiputro, Harry Eddyarto and Kim Jones, "How ARCO Drills High-Angle Wells Offshore Indonesia," WORLD OIL, March 1993, 11 pages
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	C88	C.H. Fleming, "Comparing Performance of Horizontal Versus Vertical Wells," WORLD OIL, March 1993, 7 pages
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	C94	Dean E. Gaddy, "Inland Barge to Allow Cluster Drilling in Nigeria," OIL & GAS JOURNAL, August 30, 1999, 7 pages
	C95	Cliff Hogg, "Comparison of Multilateral Completion Scenarios and Their Application," SPE 38493, Society of Petroleum Engineers, Copyright 1997, 11 pages
	C96	S.W. Bokhari, A.J. Hatch, A. Kyei and O.C. Wemgren, "Improved Recoveries in the Pickerill Field from Multilateral Drilling into Tight Gas Sands," SPE 38629, Society of Petroleum Engineers, Copyright 1997, 15 pages

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	C100	R.W. Taylor and Rick Russell, "Case Histories: Drilling and Completing Multilateral Horizontal Wells in the Middle East," SPE/IADC 39243, Society of Petroleum Engineers, Copyright 1997, 14 pages
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	C102	John H. Perry, Leonard J. Prosser, Jr., Joseph Cervik, "Methane Drainage from the Mary Lee Coalbed, Alabama, Using Horizontal Drilling Techniques," SPE/DOE 8967, Society of Petroleum Engineers, May 18, 1980, 6 pages
	C103	Gerald L. Finfinger, Leonard J. Prosser, and Joseph Cervik, "Influence of Coalbed Characteristics and Geology on Methane Drainage," SPE/DOE 8964, Society of Petroleum Engineers, May 18, 1980, 6 pages
	C104	Hilmer Von Schonfeldt, B. Rao Pothini, George N. Aul and Roger L. Henderson, "Production and Utilization of Coalbed Methane Gas in Island Creek Coal Company Mines," SPE/DOE 10817, Society of Petroleum Engineers, May 16, 1982, 10 pages
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	C106	D.G. Masszi and A.A. Kahil, "Coal Demethanation Principles and Field Experience," THE JOURNAL OF CANADIAN PETROLEUM TECHNOLOGY, July-August 1982, 4 pages
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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 17601-038001	Application No. 10/769,221
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)		Applicant Joseph A. Zupanick	
		Filing Date January 30, 2004	Group Art Unit 3672
(37 CFR §1.98(b))			

Other Documents (include Author, Title, Date, and Place of Publication)		
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	C115	T.L. Logan, J.J. Schwoebel and D.M. Horner, "Application of Horizontal Drainhole Drilling Technology for Coalbed Methane Recovery," SPE/DOE 16409, Society of Petroleum Engineers/U.S. Department of Energy, Copyright 1997, 12 pages
	C116	Samuel O. Osisanya and Robert F. Schaffitzel, "A Review of Horizontal Drilling and Completion Techniques for Recovery of Coalbed Methane," SPE 37131, Society of Petroleum Engineers, Copyright 1996, 13 pages
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	C139	Victor M. Luhowy and Peter D. Sametz, "Horizontal Wells Prove Effective in Canadian Heavy-Oil Field," OIL & GAS JOURNAL, June 28, 1993, 6 pages
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	C143	D. Keith Murray, "Deep Coals Hold Big Part of Resource," THE AMERICAN OIL & GAS REPORTER, May 2002, 8 pages
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